Comparisons of Job Characteristics

Focus Occupation: Sheet Metal Workers (47-2211)

Associated Occupation: Plumbers, Pipefitters, and Steamfitters (47-2152)

Compare Knowledge Compare Skills Compare Abilities Compare Detailed Work Activities Compare Tools and Technologies

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 93

Focus Occupation: Sheet Metal Workers (47-2211)

Associated Occupation: Plumbers, Pipefitters, and Steamfitters (47-2152)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation	
Mechanical	6.8	17.0	17.4	0	Current knowledge level may be sufficient	
Building and Construction	4.0	16.6	16.5	0	Current knowledge level may be sufficient	
Design	5.2	11.2	14.9	>>	Current knowledge level is likely more than sufficient	
Mathematics	9.2	11.0	14.8	>>	Current knowledge level is likely more than sufficient	
Physics	4.3	9.6	7.3	<<	Extensive education and/or training may be required	
Engineering and Technology	5.7	9.1	13.5	>>	Current knowledge level is likely more than sufficient	

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 77

Focus Occupation: Sheet Metal Workers (47-2211)

Associated Occupation: Plumbers, Pipefitters, and Steamfitters (47-2152)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation	
Operation and Control	5.4	8.7	7.4	<	A higher skill level may be required	
Quality Control Analysis	5.9	8.7	8.5	0	Current skill level may be sufficient	
Repairing	3.4	8.4	6.9	<	A higher skill level may be required	
Troubleshooting	4.5	8.4	6.9	<	A higher skill level may be required	
Equipment Maintenance	3.5	7.5	7.4	0	Current skill level may be sufficient	
Equipment Selection	3.3	6.0	6.4	0	Current skill level may be sufficient	
Installation	1.7	5.5	4.4	<	A higher skill level may be required	

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities

Similarity of Focus Occupation to Associated Occupation: 87

Focus Occupation: Sheet Metal Workers (47-2211)

Associated Occupation: Plumbers, Pipefitters, and Steamfitters (47-2152)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation	
Arm-Hand Steadiness	6.8	11.8	9.5	<	Some improvement in abilities may be required	
Extent Flexibility	4.8	11.5	9.1	<	Some improvement in abilities may be required	
Visualization	7.5	11.2	12.3	0	Current ability level may be sufficient	
Finger Dexterity	7.6	11.1	8.5	<<	Extensive improvement in abilities may be required	
Multilimb Coordination	6.0	11.1	9.8	<	Some improvement in abilities may be required	
Gross Body Equilibrium	3.2	8.0	7.3	0	Current ability level may be sufficient	
Gross Body Coordination	3.9	7.4	6.6	<	Some improvement in abilities may be required	
Speed of Limb Movement	3.2	6.3	7.1	>	Current ability level is likely sufficient	
Spatial Orientation	2.7	5.8	5.1	<	Some improvement in abilities may be required	

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Activities that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 82

Focus Occupation: Sheet Metal Workers (47-2211)

Associated Occupation: Plumbers, Pipefitters, and Steamfitters (47-2152)

Work Activities	Exclusivity of Activity
Adhere to safety procedures	12
Build or repair structures in construction, repair, or manufacturing setting	54
Determine material or tool requirements	72
Determine project methods and procedures	76
Examine products or work to verify conformance to specifications	15
Fabricate, assemble, or disassemble manufactured products by hand	11
Identify base metals for welding	68
Move or fit heavy objects	8
Perform safety inspections in construction or resource extraction setting	46
Read blueprints	10
Read technical drawings	7
Solder metal parts or components together	73

Use acetylene welding/cutting torch	54
Use arc welding equipment	62
Use combination welding procedures	68
Use hand or power tools	2
Use measuring devices in construction or extraction work	41
Use soldering equipment	44
Weld together metal parts, components, or structures	54

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Tools and Technologies that Both Occupations Have in Common

Similarity of Focus
Occupation to Associated
Occupation: 86

Focus Occupation: Sheet Metal Workers (47-2211)
Associated Occupation: Plumbers, Pipefitters, and Steamfitters (47-2152)

Tools and Technologies	Exclusivity
Bandsaws and accessories	26
Computer printers	2
Computers	1
Content authoring and editing software	1
Cutting and crimping and punching tools	3
Cutting tools	18
Data management and query software	1
Dispensing tools	6
Electrical measuring and testing equipment	7
Face and head protection	7
Fastener setting tools	12
Forming tools	2
Gas analyzers and monitors	10
Holding and clamping tools	3
Humidity and moisture measuring instruments	15
Indicating and recording instruments	2
Industry specific software	1
Ladders and scaffolding	6
Length and thickness and distance measuring instruments	2
Lifting equipment and accessories	3
Machine tools	7
Marking tools	11
Measuring and layout tools	3
Metal bending and forming machinery	17
Non destructive examination equipment	13
Pneumatic tools	8
Power tools	2
Pressure measuring and control instruments	10
Rough and finishing tools	5

Soldering and brazing and welding machinery and supplies	6
Special tooling fixtures	16
Temperature and heat measuring instruments	6
Tool attachments and accessories	12
Transportation related equipment and instruments	29
Wrenches and drivers	2

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O^*NET (Occupation Information Network) data.